



Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 373722002600

Application Number 10/087,264

Applicant

Giacomo VACCA et al.

Filing Date February 28, 2002

Group Art Unit 1743

Mailing Date February 11 2003

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U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
<i>JS</i>	1.	02/27/2001	6,195,478	Fouquet	—	—	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
<i>JS</i>	2.	10/01/1998	DE 197 11 564	Germany	—	—	Abstract
<i>JS</i>	3.	01/07/1998	EP 0 815 940	Europe	—	—	
<i>JS</i>	4.	12/16/1998	EP 0 884 714	Europe	—	—	
<i>JS</i>	5.	12/01/2000	FR 2 794 039	France	—	—	Abstract
<i>JS</i>	6.	11/16/1988	GB 2 204 710	Great Britain	—	—	
<i>JS</i>	7.	09/30/1992	GB 2 254 161	Great Britain	—	—	

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
<i>JS</i>	8.	Togo, H. et al. (1999). "Multi-Element Thermo-Capillary Optical Switch and Sub-Nanoliter Oil Injection for its Fabrication," <i>Miro Electro Mechanical Systems, 12<sup>th</sup> IEE International Conference</i> , January 17-21, 1999 pp. 418-423.

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DATE CONSIDERED: 5/11/04

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Application Number 10/087,264

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Filing Date February 28, 2002

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## U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
JS	1.	04/04/1989	4,818,052	Le Pesant et al.	—	—	
JS	2.	03/19/1985	4,505,539	Auracher et al.	—	—	
JS	3.	01/19/1993	5,181,016	Lee	—	—	

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO

## OTHER DOCUMENTS

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Group Art Unit 1743

Mailing Date May 7, 2002

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
	1.	04/22/1986	4,583,824	Lea	—	—	
	2.	12/06/1988	4,789,228	Le Pesant et al.	—	—	
	3.	01/29/1991	4,988,157	Jackel et al.	—	—	
	4.	12/16/1997	5,699,462	Fouquet et al.	—	—	
	5.	07/13/1999	5,921,678	Desai et al.	—	—	
	6.	09/21/1999	5,956,005	Sheridon	—	—	
	7.	09/28/1999	5,960,131	Fouquet et al.	—	—	
	8.	11/02/1999	5,978,527	Donald	—	—	
	9.	04/25/2000	6,055,344	Fouquet et al.	—	—	
	10.	06/06/2000	6,072,924	Sato et al.	—	—	
	11.	01/09/2001	6,170,981	Regnier et al.	—	—	
	12.	04/03/2001	6,210,128	Rife et al.	—	—	
	13.	05/15/2001	6,231,737	Ramsey et al.	—	—	
	14.	09/11/2001	6,287,520	Parce et al.	—	—	
	15.	10/23/2001	6,306,659	Parce et al.	—	—	
	16.	12/18/2001	6,331,073	Chung	—	—	
	17.	12/18/2001	6,331,439	Cherukuri et al.	—	—	
	18.	01/01/2002	6,334,676	Kaszczuk et al.	—	—	
	19.	01/08/2002	6,337,740	Parce	—	—	
	20.	01/29/2002	6,342,142	Ramsey	—	—	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
	21.	06/24/1994	JP 06-175052	Japan	—	—	
	22.	04/07/1995	JP 07-092405	Japan	—	—	

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<i>[Signature]</i>	23.	03/08/1996	JP 08-062645	Japan				
<i>[Signature]</i>	24.	12/27/2001	WO 01/98759	WIPO			Derwent Abstract	

## OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
<i>[Signature]</i>	25.	Patent Abstracts of Japan for Japanese patent no. 06-175052, published on June 24, 1994 (2 pages, abstract only).
<i>[Signature]</i>	26.	Patent Abstracts of Japan for Japanese patent no. 07-092405, published on April 07, 1995 (1 page, abstract only).
<i>[Signature]</i>	27.	Patent Abstracts of Japan for Japanese patent no. 08-062645, published on March 08, 1996 (1 page, abstract only).
<i>[Signature]</i>	28.	Beni, G. and Hackwood, S. (1981). "Electro-Wetting Displays," <i>Appl. Phys. Lett.</i> 38(4): 207-209.
<i>[Signature]</i>	29.	Jackel, J. L. et al. (1983). "Electro Wetting Switch for Multimode Optical Fibers," <i>Applied Optics</i> 22(11): 1765-1770.
<i>[Signature]</i>	30.	Jang, J. and Lee, S. S. (2000). "Theoretical and Experimental Study of MHD (Magnetohydrodynamic Micropump)," <i>Sensors and Actuators</i> 80:84-89.
<i>[Signature]</i>	31.	Krijnen, G. J. M. et al. (1999). "Optical Devices Based on Fluidic Controlled Two-Mode Interference," <i>J. Micromech. Microeng.</i> 9:203-205.
<i>[Signature]</i>	32.	Lea, M. C. (1981). "Optical Modulators Based on Electrocapillarity," <i>Optic Letters</i> 6(8):395397.
<i>[Signature]</i>	33.	Lee, J. and Kim, C-J (2000). "Surface-Tension-Driven Microactuation Based on Continuous Electrowetting," <i>Journal of Microelectromechanical Systems</i> 9(2):171-180.
<i>[Signature]</i>	34.	Lemoff, A. V. and Lee, A. P. (2000). "An AC Magnetohydrodynamic Micropump," <i>Sensors and Actuators</i> B63:178-185.
<i>[Signature]</i>	35.	Makihara, M. et al. (1999). "Micromechanical Optical Switches Based on Thermocapillary Integrated in Waveguide Substrate," <i>Journal of Lightwave Technology</i> 17(1):14-18.
<i>[Signature]</i>	36.	Pollack, M. G. and Fair, R. B. (2000). "Electrowetting-Based Actuation of Liquid Droplets for Microfluidic Applications," <i>Applied Physics Letters</i> 77(11):1725-1726.
<i>[Signature]</i>	37.	Prins, M. W. J. et al. (2001). "Fluid Control in Multichannel Structures by Electrocapillary Pressure," <i>Science</i> 291:277-280.
<i>[Signature]</i>	38.	Richter, A. et al. (1991). "Electrohydrodynamic Pumping and Flow Measurement," <i>IEEE PROC. MEMS</i> , New York, USA, pp. 271-276.
<i>[Signature]</i>	39.	Richter, A. and Hermann, S. (1990). "An Electohydrodynamic Micropump," <i>IEEE PROC. MEMS</i> , New York, USA, pp. 99-104.

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<i>SB</i> <b>Patent &amp; Trademark Office</b>	40.	Ross, D. and Aitchison, J. S. (2001). "Microfluidic Optical Switches Using Two Non-Mixing Fluids in a Mach Zehnder Interferometer," OECC/IOOC 2001 Conferences Incorporating ACOFT, Monday 2 July-Thursday 5, July, 2001, 2 pages.
	41.	Sakata, T. et al. (2001). "Improvement of Switching Time in a Thermocapillarity Optical Switch," <i>Journal of Lightwave Technology</i> 19(7):1023-1027.
	42.	Sato, M. (1994). "Electrocapillarity Optical Switch," <i>IEICE Trans. Commun.</i> E77-B(2):197-203.
<i>SB</i>	43.	Vallet, M. et al. (1996). "Electrowetting of Water and Aqueous Solutions on Poly(Ethylene Terephthalate) Insulating Films," <i>Polymer</i> 37(12):2465-2470.

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